



To: Department of Water Resources
Urban Water Use Efficiency Unit
ATTN: Julie Saare-Edmonds, Senior Environmental Scientist

From: Robert Hitchner, Nexus eWater

Date: June 16, 2015

Re: Proposed MWELO Regulations

On behalf of Nexus eWater, the manufacturer of on-site Home Water Recycling solutions that meet the requirements of the California Code, I would like to make the following comments on the proposed Department of Water Resources' (DWR) Model Water Efficient Landscape Ordinance (MWELO) regulations slated for public hearing on June 19th in Sacramento. First, we appreciate all the work that has gone into this and how rapidly you are addressing the issues.

However, with respect to on-site water reuse in the residential sector, this draft document does not fully reflect the State's/Water Board's/Governor's stated goal to actively encourage and promote the use of on-site water sources. On-site water reuse refers primarily to harvested rainwater, untreated greywater, and treated greywater.

As the MEWLO are currently drafted, it is probable that most builders, landscape designers and homeowners will decide to use only potable water on their landscapes. The MWELO includes neither a requirement nor an incentive to use any on-site water sources.

On this point, it should be noted that the DWR's draft MWELO may be at odds with the emergency Building Standards that were recently published by the California Building Standards Commission (CBSC) and the Department of Housing and Community Development (HCD). Those Emergency Regulations took the step to define on-site water recycling and to incorporate on-site water resources in the definition of Special Landscape Areas (SLA). Under their regulations, landscapes that are supplied by on-site water sources can qualify for an additional allowance of landscape water under the calculation of the Maximum Applied Water Allowance (MAWA). This is not the case in DWR's draft MWELO.

The lack of real encouragement is in fact a kind of discouragement. It may be much easier to simply use potable water on one's landscape and forget about on-site water resources even though this is not a long term approach to the problem. Ideally, reuse will allow for an additional water supply. Otherwise, as California grows, we will continue to use our most expensive water where other water might be more appropriate.

Below are some points that we feel could address these differences between the CBSC/HCD adopted Emergency Regulations and DWR's draft MWELO:

- In the MWELO REVISION ORDINANCE FOR WEB POSTING 06.12.15 (VL) PUBLIC DRAFT FOR WEB POSTING, it is stated that, "per the Governor's Executive Order, the new draft MWELO aims to encourage the use of grey water and the greater use of rain water." This seems to be an unfortunate mis-statement of the intent of the new draft MWELO, which states, but does not concretely support, on-site water reuse. We appreciate encouraging the use of any on-site water resource, but this needs to be followed with specific methods that will lead to reuse strategies. Unfortunately, the extent of encouragement for greywater is the use of the word "encourage" in a new section on greywater. And the extent of encouragement for rainwater is a "recommendation" that rain water be used (further comments below).

For example, the draft MWELO does not in any way promote or incentivize the use of any of harvested rainwater, untreated greywater, or the latter's variant, "on-site treated residential greywater." (The document makes no distinction between treated and untreated greywater solutions). Instead, the only incentive for landscape designers and homeowners to use these on-site water resources seems to be the call to their personal virtue.

- Section 492.14 – Recycled Water: This would be the best place to incorporate the use of on-site water resources, including rainwater, untreated greywater, and treated greywater. This is perhaps the most critical point that is missing in the document.
- Section 491(u) – Definitions: "Greywater" is currently defined, but there is no definition for "on-site treated residential greywater," which is defined in the Building Code. Without referencing the latter, it seems that the DWR MWELO recognizes untreated greywater, but does not recognize treated greywater. We would recommend that the MWELO's adopt the following definition for treated greywater:

"On-site treated greywater' is waste water from hand sinks, showers, tubs, washing machines that has been treated on certified equipment as required in the California Building Code."

- Section 492.15: This section lacks any real guidance and merely "encourages" the implementation of greywater systems. Nowhere in draft does the document incorporate greywater into any calculation for MAWA, etc. There is no meaningful encouragement for the use of greywater in this draft ordinance.
- Section 492.16: The same comments as for Section 492.15 apply to this Section on rainwater capture. Rainwater cisterns are "recommended," but rainwater too cannot be used in any calculation required under the MWELO. Again, this recommendation does not encourage the use of rainwater in any meaningful way.
- Section 491(ppp): A Special Landscape Area (SLA) is defined as "an area of the

landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, and water features using recycled water.” We would amend the definition of SLAs to also include those “areas irrigated with **recycled water, harvested rain water, untreated grey water, or treated greywater.**” As in the recently published new Building Standards, an alternative way is to define "on-site recycled water" and allow SLAs to be "irrigated with recycled water or on-site recycled water."

- Section 492.6(b)(12) - Landscape Design Plan: The MWELo has added a new requirement (not in the current MWELo) that the Landscape Design Plan identify any greywater discharge piping and areas of distribution. It is unclear from the draft MWELo why is this needed? Does this apply only to untreated greywater? Does this also apply to irrigation systems fed by on-site treated residential greywater or on-site harvested rainwater? (Note that this is not required in the case that harvested rain water is being used for irrigation. On-site treated residential greywater is nowhere referenced in the document).

Thank you so much for the opportunity for input. We look forward to additional conversations.